

HM1016 Manufacturing Process, Intermediate Course 1 7.5 credits

Produktion, fortsättningskurs 1

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for HM1016 valid from Spring 2010

Grading scale

A, B, C, D, E, FX, F

Education cycle

First cycle

Main field of study

Mechanical Engineering, Technology

Specific prerequisites

Basic knowledge of:

- HM1000, materials and production 1
- HM1003, Engineering Materials and Production 2
- Statistics

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After completing the theory and practice elements of the course the student will be able to:

- Selecting the metering equipment and take measurements of manufactured parts.
- Perform hardware integrity tests on the machine tool
- Apply statistical process control during production
- Customize features for automated assembly
- Apply module classification of products for simplifying the assembly variant
- Customize products for complete processing
- Adaptation of product management with irb Technology

Course contents

- Mechanical Metrology
- Statistical Process Control
- Machine tools
- Assembly Technology
- Complete Processing
- Irb-technology
- Automated manufacturing and assembly
- Module by-sector production

Course literature

Jarfors: "Tillverkningsteknologi", Liber förlag, ISBN 978-91-44-07039-1

Examination

- ÖVN1 Exercises, 3.0 credits, grading scale: P, F
- TEN1 Written examination, 4.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

Passed written exam, grading scale A-F Passed exercises and laboratory, grading scale P/F

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.